



Economic and Social Council

Distr.: General
13 March 2018

Original: English

Economic Commission for Europe

Conference of European Statisticians

Group of Experts on National Accounts

Seventeenth session

Geneva, 22-25 May 2018

Item 6 of the provisional agenda

The role of satellite accounting within the national accounts

A Satellite Account for Education and Training

Prepared by Office for National Statistics of United Kingdom¹

Summary

This paper presents the findings from a pilot exercise to develop and compile a United Kingdom Satellite Account for Education and Training. In producing these accounts, the Office for National Statistics (ONS) used the framework established in the 'Guide on Measuring Human Capital'. The paper explains in detail the methodology and the data sources that have been used for the UK case. It also presents the main tables of the Satellite Account on Education and Training and analysis on the results.

¹ Prepared by Vasilios Antonopoulos, Oliver Mann and Dominic Webber

GE.18-03871(E)



* 1 8 0 3 8 7 1 *

Please recycle



I. Introduction

1. This report presents the findings from a pilot exercise to develop and compile a UK Satellite Account for Education and Training (SAE). Satellite accounts are a useful research tool to allow more focus on particular sectors of the economy. There are two standard types of satellite account – one in which the System of National Accounts (SNA) production boundary is extended, but focuses in more detail on a specific sector or industry, providing more detail than international standards require. The second type of satellite account goes a step further and extends the boundaries of production, consumption, or capital formation beyond the conventional SNA definitions. In that sense, the SAE is the former – focussing on more detail on the expenditures, by specific financiers on different education products, in a manner that is consistent with National Accounts.

2. In producing this SAE, the Office for National Statistics (ONS) used the framework established by the Task Force on Measuring Human Capital in their report ‘Guide on Measuring Human Capital’². This sets out a method of improving the measurement of human capital through the development of a SAE. This development is justified on the basis that investment on education and training is a vital factor for the improvement of human capital.

3. The SAE highlights the investment on both formal and non-formal education within the United Kingdom, as well as training that is provided by enterprises. It focuses on monetary and non-monetary data, and aims to be consistent with National Accounts classifications and is balanced accordingly with Supply and Use Tables. As there are a series of classifications that are used within the National Accounts that show the various transactions of education, the International Standard of Classification of Education (ISCED), developed by the United Nations Educational, Scientific, and Cultural Organisation (UNESCO) is used as the main classification of education within this SAE.

4. This SAE presents the expenditure, by detailed education product, by various sectors of the UK. This report explains key variables of the SAE, which describe the products and the sources that have been used to develop the SAE. It shows the identification of the products, producers and financial agents, indicating the transactions between financing agents and the producers of education. The main tables, presented in the Annex, consist of supply and use tables and resources and use tables with a focus of the education sector and the different breakdowns within it. The supplementary tables will cover non-monetary education data for the SAE.

II. Key definitions

A. Financing agents in the Satellite Accounts for Education and Training

5. The SAE aims to present a detailed breakdown of the educational sector by mapping the relationship between the financing agents, education producers and education products. The SAE focuses on six financing agents:

- Central Government³;
- Local Government⁴;

² Taskforce on Education and Training (2016) ‘Guide on Measuring Human Capital’

³ This subsector includes all administrative departments of the state and other central agencies whose competence extends normally over the whole economic territory, except for the administration of social security funds (ESA, 2010).

- Financial/Non-financial corporations⁵;
- Non-profit institutions serving households (NPISH)⁶;
- Households⁷; and
- Rest of the World⁸.

B. Education products in the Satellite Accounts for Education and Training

6. The ISCED classification is used to classify education spending. A simplified form of ISCED, as suggested within the 'Guide on measuring Human Capital', is used to differentiate between education products.

7. **Education product 1 (EP1)** is equivalent to ISCED 0 (Pre-primary education) and ISCED 1 (Primary education). Within the UK, the Central Government provides funding for Academies⁹ and Free schools¹⁰ that teach primary education. Both these types of schools receive their funding from the Central Government however they have the freedom to set their own term dates and whether they follow the national curriculum. The Local Government funds state primary schools, which follow the national curriculum. Additionally, there are independent primary¹¹ schools which receive their income from fees

⁵ This subsector includes those types of public administration whose competence extends to only a local part of the economic territory, apart from local agencies of social security funds (ESA, 2010).

⁶ Financial corporations consist of all resident corporations or quasi-corporations principally engaged in financial intermediation or in auxiliary financial activities which are closely related to financial intermediation (OECD, 2001). Non-financial corporations are corporations whose principal activity is the production of market goods or non-financial services (OECD, 2001).

⁷ The non-profit institutions serving households (NPISHs) sector (S 15) consists of nonprofit institutions which are separate legal entities, which serve households and which are private non-market producers. Their principal resources are voluntary contributions in cash or in kind from households in their capacity as consumers, from payments made by general government and from property income (ESA, 2010).

⁸ The households sector (S 14) consists of individuals or groups of individuals as consumers and as entrepreneurs producing market goods and non-financial and financial services (market producers) provided that the production of goods and services is not by separate entities treated as quasicorporations. It also includes individuals or groups of individuals as producers of goods and nonfinancial services for exclusively own final use (ESA, 2010).

⁹ The rest of the world sector (S 2) is a grouping of units without any characteristic functions and resources; it consists of non-resident units insofar as they are engaged in transactions with resident institutional units, or have other economic links with resident units. Its accounts provide an overall view of the economic relationships linking the national economy with the rest of the world. The institutions of the EU and international organisations are included (ESA, 2010).

¹⁰ Academies are publicly funded independent schools, which don't have to follow the national curriculum and can set their own term times. They still have to follow the same rules on admissions, special educational needs and exclusions as other state schools. Academies get money direct from the government, not the local council. They're run by an academy trust which employs the staff. Some academies have sponsors such as businesses, universities, other schools, faith groups or voluntary groups. Sponsors are responsible for improving the performance of their schools.

¹¹ Free schools are funded by the government but aren't run by the local council. They have more control over how they manage themselves. They're 'all-ability' schools, so can't use academic selection processes like a grammar school. Free schools can set their own pay and conditions for staff. And change the length of school terms and the school day. They don't have to follow the national curriculum.

¹² Private schools (also known as 'independent schools') charge fees to attend instead of being funded by the government. Pupils don't have to follow the national curriculum. All private schools must be registered with the government and are inspected regularly.

that they charge to households. While these schools are not controlled by the government, and need not follow the national curriculum, they are inspected by the regulator, Ofsted. As this education product includes pre-primary education, this section also includes childcare and early learning services, which help to educate pupils before they join primary school.

8. **Education Product 2 (EP2)** includes ISCED 2 (Lower Secondary School) and ISCED 3 (Higher secondary school). This is classified as secondary education. Central Government funding on secondary schools includes expenditure on Academies and Free schools providing secondary schools education. While, Local Government funders state secondary schools and Grammar schools which both follow the national curriculum. Independent secondary schools receive their income from fees they charge to households.

9. **Education Product 3 (EP3)** includes ISCED 4 (Post-secondary non-tertiary education), ISCED 5 (Short-cycle tertiary education), ISCED 6 (Bachelor's or equivalent level), ISCED 7 (Master's or equivalent level), and ISCED 8 (Doctoral or equivalent level). These are funded from a series of sources such as, Central and Local Government, Households, Financial and Non-Financial Corporations, NPISH and Rest of the World, through tuition fees, government funding, and grants.

10. **Education Product 4 (EP4)** measure non-ISCED classified education. This includes vocational training courses, education support, permanent adult education courses, recreational and vocation rehabilitation services and private courses¹². This type of education is provided by a variety of sources, including Further Education Colleges and spending by employers on training their employees.

11. **Education Product (6)** measures research and development in education.

12. Ancillary expenditure include expenditure on equipment, such as textbooks. The difficulty in the measurement of EP5 within this report is that our sources tend to report total expenditure on this equipment, some of which include sales for non-educational purposes. As a result the expenditure reported within the SAE may be over-estimation. Because of this is an issue, estimates for EP5 have not been included, except in the case of Households which they have been included within the education product expenditure.

13. ONS used a variety of sources to calculate the SAE. Many of these sources originate directly from ONS. For instance, the SAE makes extensive use of National Accounts data including Supply and Use tables and Public Spending data, as well as the Living Costs and Food Survey – a household expenditure survey. In addition, the SAE relies on data from the UK's Department for Education (DfE) and the Higher Education Statistical Agency (HESA). In particular, data from DfE was used to inform on financing of pre-primary, primary and secondary education. HESA data was used to calculate finance flows for the higher education and colleges. Finally, ONS consulted surveys from the Department of International Development (DFID) to estimate finance flows to and from the UK to the rest of the world.

14. The base year for this SAE is 2014. This year was decided upon after a consideration of the availability of the data that the ONS used to create the SAE.

C. Correspondence with other classifications

15. Table I in the Annex, describes the breakdown of different education services by ISCED and the correlation with different education products (EP). In addition, it elaborates

¹² Source – "Guide on measuring Human Capital" page 90

upon the connection that the SAE classifications have with other classifications of education expenditure. More specifically, other classifications of measuring educational expenditure are:

- International Standard Classification of All Economic Activities (ISIC rev.4);
- Central Product Classification (CPC¹³ version 2.1);
- Classification of the Functions of Government (COFOG);
- Classification of the Purposes of Non-Profit Institutions Serving Households (COPNI), and;
- Classification of Individual Consumption According to Purpose (COICOP)

16. Table 1 indicates the products within each classification that are used to measure record expenditure on education and training. While this demonstrates which section of COFOG, for example, will go into EP1, it does not provide a precise definition that shows what is included and what is excluded.

17. The ISCED definitions have been sourced from Eurostat¹⁵. While the ISIC rev.4¹⁴, CPC version 2.1¹⁵, COFOG¹⁶, COPNI¹⁷, and COICOP¹⁸ definitions are sourced from UNSTATS.

III. Constructing the main tables of the Satellite Accounts for Education and Training

A. Table 2 - Transactions between Financing Agents and Producers of education and training

18. Table 2 demonstrates the transactions between financing agents and producers of education and training. As stated earlier, the financing agents considered are:

- Central State Government;
- Local Government;
- Financial/Non-financial corporations;
- NPISH;
- Households;
- and Rest of the World.

19. There are three producers: General Government, Corporations and NPISH, and Rest of the World. Within each of these producers there is a breakdown by education product: EP1, EP2, EP3, and EP4.

20. Central Government expenditure on education is identified from the ONS's European System of National Accounts (ESA) Tables for Annual Expenditure of Central Government. These tables are used to identify spending by the Central Government within the UK, broken down by the COFOG classification. Total Government expenditure is used to estimate the Total Central Government Expenditure. However, a proportion of Central

¹³ EUROSTAT (2016) 'ISCED'

¹⁴ UNSTATS (n.d.) 'ISIC rev.4'

¹⁵ UNSTATS (n.d.) 'CPC version 2.1'

¹⁶ UNSTATS (n.d.) 'COFOG'

¹⁷ UNSTATS (n.d.) 'COPNI'

¹⁸ UNSTATS (n.d.) 'COICOP'

Government expenditure is transferred to Local Government. Since this is not spent directly by Central Government on education, instead by Local Government, this amount is excluded from Central Government expenditure to avoid double counting. The Central government transfers to Local Government are identified as the Local Government sections¹⁹ within the Property Income²⁰, Other Current Transfers²¹, and Capital Transfers²². The above transfers give the total transfers that go from Central government to Local government, and therefore would need to be excluded from the Total Government Expenditure figure. In addition to transfers to Local Transfers, subsidies are excluded, since they represent Central Government subsidies to Corporations and NPISH.

21. Central Government provides expenditure to the General Government produced education services. These are Pre-primary, Primary, and Secondary schools, and spending by other Central Government institutions on education, which signify as EP1, EP2, and EP4²³ within the General Government producer's section.

22. The Central Government also provides expenditure to Corporations and NPISH. This is through its spending on EP3 and through to EP4²⁴. This will exclude transfers to Local Government; however this will still include subsidies that are going to Corporations. There is some education spending from the Central Government that is not included within Table 2. The spending on Subsidiary Services²⁵ and R&D Education²⁶ has not been included, as they are out of the scope of SAE as it has been explained in table 1.

23. Additionally, the Central Government invests on education in foreign countries, which is included in the Rest of the World in the SAE. Data on this are provided by DFID, who publish the amount of spending on International Development by sectors, including education. This data are comparable with National Accounts data.

24. **Local Government** expenditure is identified within the ONS's LSA Tables. Like the Central Government expenditure, this is used to indicate Public Spending by Local Government broken down by the COFOG classification. Total Local Government expenditure, in contrast with Central Government, does not provide any transfers to Central Government or subsidies to corporations or NPISH. Local Government spends on EP1, EP2, and EP4²⁷ via General Government producers. In addition, Local Government also invests on EP3 and EP4²⁸, produced by corporations and NPISH.

25. Universities receive income from a variety of sources: Central and Local Government, Financial/Non-Financial Corporations, Households, NPISH, and Rest of the World. The ONS classifies Universities as NPISH²⁹ and for the purpose of this SAE has been classified under corporations and NPISH producers. The data for production by universities is largely obtained by Higher Education Finance Survey (HE Finance Survey) published by the Higher Education Statistics Agency.

26. The HE Finance Surveys provides information for the expenditure by Financial/Non-Financial Corporations, Households, NPISH, and Rest of the World into the

¹⁹ S1313 Local Government – See appendix

²⁰ D4 Property Income – See appendix

²¹ D7 Other Current Transfers – See appendix

²² D9 Capital Transfers – See appendix

²³ COFOG number 0908 – Education n e c

²⁴ COFOG number 0905 – Education not definable by level

²⁵ COFOG number 0906 – Subsidiary Services

²⁶ COFOG number 0907 – R&D Education

²⁷ COFOG number 0908 – Education n e c

²⁸ COFOG number 0905 – Education not definable by level

²⁹ ONS (2016) 'Households and non-profit institutions serving households'

EP3. Financial/Non-Financial Corporations provide research grants and provide expenditure on services that the university provides to them. The research grants are specified as income that universities receive from research grants from UK industry, commerce, and public corporations³⁰. Also the survey includes the income from services that the Universities run for industrial and commercial companies.³¹

27. The HE finance survey also reports tuition fees that households pay to universities. For the purpose of this SAE, ONS has included tuition fees from EU students and non-EU students into the Rest of The World funding for universities. As the rest of the world section includes EU and non-EU students, this will be excluded from the calculation of UK tuition fees. Information on the number of home and EU students, sourced from the Student in higher education survey (HESA), is used to split UK and EU students, leaving the total tuition fees for Home students³². Households additionally spend non-credit-bearing fees³³ to universities which need to be included in the overall measures, since they are household expenditure on education³⁴.

28. Research Councils funded from the UK Department for Business, Energy, and Industrial Strategy (BEIS), The Royal Society, British Academy and the Royal Society of Edinburgh and UK-based charities – all NPISH – invest into the EP3³⁵. Universities receive income generated by their own services. As this income is raised by universities – classified as NPISH – it is included within the NPISH financing agent section. This includes income that universities receive through:

- Residences and catering operations (including conferences);
- Income from health and hospital authorities (excluding teaching contracts for student provision);
- Release of deferred capital grants, Income from intellectual property rights; and
- Other operating income.

29. A significant proportion of university income comes from the rest of the world. Research grants are received by universities from EU Government Bodies, EU-based charities, EU industry, commerce and public corporations, Non-EU-based charities, Non-EU industry, commerce and public corporations³⁶. They also receive tuition fees from abroad from both EU students and Non-EU students.

30. One issue with the HE Finance Survey is that it is measured on an academic year basis – September to August. This does not follow the calendar year template that the piloting of the Tables has aimed to fulfil. The ONS methodology to transform academic

³⁰ In Table G – Variable 'UK Industry, Commerce, Public Corporations' – See Appendix

³¹ Table H – Variable 'Other Income' – See appendix

³² Table B – See appendix

³³ The University of Sheffield defines this as 'Non-credit bearing CPD courses designed for a particular employer or group of professionals, typically with no assessment attached. Certificates of attendance are often provided.' Source – University of Sheffield – Approval and Quality Assurance of Short Courses

³⁴ Table F – Variable 'non-credit-bearing fees' – See appendix

³⁵ Table G – Variable 'BIS Research Councils, The Royal Society, British Academy and the Royal Society of Edinburgh' and 'UK-based charities (open competitive process)', 'UK-based charities (other)', and 'other sources' – see appendix

³⁶ Table G – Variable 'EU Government Bodies', 'EU-based charities (open competitive process)', 'EU industry, commerce and public corporations', 'EU other', 'Non-EU-based charities (open competitive process)', 'Non-EU industry, commerce and public corporations', and 'Non-EU other' – see appendix

years into calendar years can be found within the Appendix under the title 'Converting Academic Year surveys into calendar years'.

31. **Further Education Colleges** receive income from a series of sources: Central Government, Local Government, Financial/Non-financial Corporations, Households, NPISH, and Rest of World. Further Education Colleges are placed within EP4 in the corporations and NPISH section, according to the ONS classification for National Accounts³⁷. The investments on EP4 can be found within the Further Education Colleges accounts that are published by Skills Funding Agency and the Education Funding Agency. The above surveys include the entire income and expenditure for every Further Education College in England. As this survey only measures England, ONS imputed estimates for the wider UK using a method which is consistent with that used by DIE. More information on this methodology is located within the Appendix.

32. The NPISH sector provides research grants for further education. The Other funds³⁸ section is used to indicate these Research Grants and Contracts. This is a subsection of an overall Research Grants and Contracts section. The main measure of showing Research Grants and Contracts is not chosen as this includes research grants from Europe, which should be allocated to Rest of the World. As a result, the other research grants variable has been chosen. The Direct European funds³⁹ is used to show Rest of the World expenditure on tuition fees for Further Education colleges. Further Education Colleges also raise their own income. As Further Education colleges are classified as NPISH, this has been classified as income received by NPISH. This income can be found from the FE College Accounts and is specified as Endowment and investment income.

33. Households fund Further Education Colleges through tuition fees⁴⁰. Statistics on these fees, however, will include an element paid by non-UK students. Therefore, "International students non UK/EU"⁴¹ is subtracted from "Fee Income", and is then used for the Rest of the World expenditure on tuition fees for Further Education.

34. Academies in the UK are a form of state-funded primary and secondary schools. They are controlled by the Central Government, but receive grants from NPISH as well as their own-self generated income. Expenditure on academy-provided education is within the 'Income and expenditure in Academies in England' publication by the Department for Education. Academies are only operational inside England, so there is no need to estimate an entire UK figure. Academies operate as both Primary and Secondary schools; therefore Primary Schools are included into EP1, while Secondary Schools are included into EP2. As they are controlled by Central Government, these figures will be placed within the General Government section. The Grants from NPISH are identified from Non-Governmental Grant funding column, while the 'Total Self-Generated Income' identifies the self-generated income.

35. One of the main aims of the SAE is to highlight expenditure on on-the-job training. This is considered as part of EP4 and produced by Corporations and NPISH sectors. The Employers Skills Survey published by the UK Commission for Employment and Skills provides useful information for this form of expenditure. In the absence of 2014 data, average expenditure in 2013 and 2015 are used. Because the on-the-job expenditure is spent within the corporation and not on training services, is excluded from the calculation. On the

³⁷ ONS (2012) 'Reclassification of Further Education Colleges and sixth form colleges in England, May 2012'

³⁸ Variable Research grants and contracts_S1a.3b_Other funds'

³⁹ Variable - Research grants and contracts_S1a.3a_Direct European funds'

⁴⁰ Variable - Income_T1.2_Fee income'

⁴¹ Variable - Tuition fees and education contracts_S1a.2i_International students non UK/EU'

other hand, off-the-job training has been calculated and it has been allocated into the EP4 and EP3 produced from Corporations and NPISH.

36. Data on household payments of tuition fees to Independent Schools are sourced from the Independent Schools Council *Annual Census Survey* published by the Independent Schools Council. The total amount of expenditure on Independent Schools is calculated by multiplying the average fees⁴² by the number of pupils⁴³. However ONS has separated the fees that are paid from UK pupils and non-UK pupils in order to categorise them into the appropriate financing Agent of table 2⁴⁴. There are three main types of independent schools: Junior, Mixed-Age, and Senior. According to Table 1, junior schools are classified as EP1, while senior schools are classified as EP2. Mixed-aged schools are schools that provide both a Primary School (junior school) and Secondary schools (Senior School). Therefore, the population for Mixed-Age schools are disaggregated so that its population can be classified into junior and secondary schools. As secondary school starts at year 7, the total pupils below year 7 are classified as junior schools, while those in year 7 and above as in secondary. The proportion of those going to junior and secondary schools are then multiplied to the number of pupils going to mixed-age schools. This means that there is a complete number for those going to both Junior and senior schools. These numbers are then multiplied by the average fees for their respective type of schools in order to indicate total expenditure by households on fees to independent schools.

37. Spending by households on Childcare and Early Learning are used to measure Pre-Primary education. The source for this information is DfE's *Childcare and Early Year Learning survey of parents*. This survey indicates the mean total weekly payment on childcare by type⁴⁵, therefore in order to find the total expenditure this will need to be multiplied by the number of weeks within the year (52) and by the number of families who use childcare⁴⁶. This will create a figure indicating the total expenditure on childcare by households. Multiple types of Childcare are measured, however not all of them fit the definition of EP1 set out within Table 1. Therefore, the following types of childcare are used: 'Nursery School', 'Nursery Class attached to a primary or infants' school', 'Day nursery', and 'Playground or pre-school'. These variables measure formal education, while the other variables were informal.

I. Balancing with National Accounts

38. Many of the data sources used within Table 2 are non national-accounts sources. As a result, the *Supply and Use* tables published by the ONS are used to balance the result of the SAE with national accounts consistent expenditure on education. These tables give an estimation of the Total Government, NPISH, Household, Financial/Non-Financial Corporations, and Rest of the World expenditure on Education services. By using these respective figures as the total amount spent on education by those financing agents, we can calculate the proportions of spending within each financing agents, based on the sources described above.

B. Table 3 - Supply and Use Table

39. The aim of Table 3 is to expand and enhance traditional Supply and Use tables, placing more emphasis on the specific education products outlined in section 2. ONS do not

⁴² Figure 28 – See appendix

⁴³ Figure 3 – See appendix

⁴⁴ Table 2 – See appendix

⁴⁵ Table 5.3 – See appendix

⁴⁶ Table 2.2 – See appendix

publish detailed data on the supply of education products by industry. As a result, the SAI focuses primarily on the Use table, where more detailed data is available.

1. Use

40. The Use table takes the form of the standard Use table, with the education services split by market and non-market services. While the information to populate Table 3 is largely sourced from the Supply and Use Tables published by the ONS, these tables do not have the information to be able to break the education services down by Education Product type.

41. Information from the Input-Output Analytical Tables published by the ONS was used to disaggregate education services. These tables indicate industry purchases and show education services by their market⁴⁷, non-market⁴⁸, or NPISH use⁴⁹. For each industry, the market education and NPISH education are added together, to provide total market use of education. The market and non-market figures are divided by the total spent on education within each industry, thereby providing a proportion of education that is provided by the market and the non-market for each industry. These proportions are then assigned to their respective industry for education services within the published Use tables.

42. One main issue here is that the latest Input-Output Analytical tables were published in 2013 - one year earlier than the 2014 base year. The impact of this is likely to be low, as it is expected that the proportions used are unlikely to have changed significantly.

C. Table 4 Resources/Uses Table of the Sector by institution producing education

43. Table 4 indicates the income and the costs of the institutional unit producing education. These units are the same as the Financial Agents mentioned previously: Central Government, Local Government, Financial/non-financial corporations, non-profit institutions serving households, households, and the Rest of the World. This table aims to show how the different role of each sector in producing education and the way in which it is financed. The sources for Table 4 are largely similar to ones used in Table 2.

1. Resources

44. The resources section is split into four types. The first, "Current Transfers", indicates the attribution of public revenues to specific functions performed by Government – in other words, spending by the Government on Government provided educational services. This, therefore, is spending by Central Government and Local Government on the Pre-Primary, Primary, and Secondary schools, as well as General Government institutions that provide education-related spending, but not towards formal education.

45. The Current Transfers expenditure for Central Government is found within the ONS's LSA tables. The format for the calculation of Total Government Expenditure is the same as the EP1, EP2, and EP4⁵⁰ was measured in Table 2, with one exception. The exception is that the Local Government transfers are added together and put into the Local

⁴⁷ 85

⁴⁸ 85g

⁴⁹ 85n

⁵⁰ COFOG number 0908 – Education n.e.c.

Government column. This is due to the fact that they are transfers from the Central Government to Local Government.

46. Local Government Expenditure is identified within the ONS's ESA tables. Similar to the Central Government expenditure, this is used to indicate Public Spending by Local Government broken down by the COFOG classification. The methodology used to calculate the Local Government expenditure is the same as it was within Table 2.

47. In the 'Guide on Measuring Human Capital', Income from Sales is defined as *'ancillary products or partial payments for education services provided'*. This is income from the sales of an education product. Independent schools sell education via tuition fees. The data for income from sales of independent schools are included within the Independent Schools Council annual survey. Since independent schools are classified as non-financial corporations⁵¹, these results will be found within the financial/non-financial corporation's column within Table 4.

48. As households spend income on Childcare and Early learning centres, these figures are placed within Income from sales. The corporations providing the Childcare are selling it as a service and the figure is included within the Financial and Non financial Corporation's column, as they are provided by private firms. This data is sourced from the Childcare and Early learning survey produced by the Department for Education.

49. Universities receive their income from selling education via tuition fees that Households purchase. This expenditure is included within the HLE Finance Survey. The calculation for total expenditure by households on tuition fees is the same as within Table 2. Universities are classified as NPISH⁵² and so are included within this column.

50. Further Education receives income from households in exchange for education services. This are noted within the Further College Accounts produced by the Schools Funding Agency and Education Funding Agency. These are classified as NPISH⁵³ by ONS and the calculations for the fees paid by households are found within the Table 2 section of the report.

51. 'Capital Transfers' consist of particular transfers affecting the accumulation of non-financial assets of the receivers.

52. The Central Government subsidises education products produced by Financial and Non-financial Corporations. This is measured by using the ONS's central government public spending document, as it has been measured for Table 2. The subsidies are allocated to EP1, EP2 and EP4⁵⁴. These subsidies go towards the private firms, and therefore need to be including within Capital Transfers, since they do not go towards government firms.

53. The Central Government has expenditure which goes to Universities and other higher education institutions. This is identified within ONS's central government public spending dataset. As universities and higher education are classified as NPISH, any expenditure on them will be placed within that column.

54. Local Government, also, has expenditure on higher education and the administrative sections of education, which are classified as NPISH. Since this does not impact the accumulation of financial assets it is included within the Capital Transfers section.

⁵¹ ONS (2012) 'Reclassification of Further education Corporations and Sixth Form colleges in England, May 2012'

⁵² ONS (2016) 'Households and non-profit institutions serving households'

⁵³ ONS (2012) 'Reclassification of Further education Corporations and Sixth Form colleges in England, May 2012'

⁵⁴ COFOG number – Education n.e.c

55. Financial & Non-financial corporation's train their staff through expenditure to other financial and non-financial corporations. This expenditure is determined within the Employers Skills survey. The calculation makes sure that all expenditure within this sector goes towards financial and non-financial corporations.

56. Universities receive income from a variety of sources: Central Government, Local Government, Financial and Non-financial Corporations, Households, NPISH, and Rest of the World. Since Universities are classified as NPISH, any expenditure on them would go within the NPISH column. Aside from Central and Local Government, this information is found within the H.E. Finance Survey which is published by the Higher Education Statistics Authority.

57. Further Education Colleges receive funding from multiple sources: Central Government, Local Government, Financial and Non-financial Corporations, Households, NPISH, and Rest of the World. Their funding from Central Government and Local Government is included within the ONS's public spending tables, however for the other financing agents this will have to be collected through the FE Colleges survey.

58. Academies receive income from NPISH, despite the fact that they are mostly funded by Central Government. This can be found within the 'Income and Expenditure for Academies' dataset published by the Department of Education.

59. The final type of expenditure is "Other Incomes" which relate to the receipts of interest and dividends on financial investments. This type of income is received by Universities and Further Education colleges from their financial investments and other income they receive, such as income from property rights and Residences and catering operations. For universities, the above data are included within the H.E. Finance Survey. For Further Education Colleges, the other income can be found from the FE College Accounts.

2. Uses

60. The Uses table describes the various cost elements that occur in order to produce education. These are largely based upon and use the same sources as those within the Resources section. The types of uses are the following:

- Intermediate Consumption;
- Compensation of Employees;
- Wages and Salaries;
- Employers' social contributions;
- Taxes on production and imports Less Subsidies;
- Consumption of fixed Capital;
- Total Current expenditure/output;
- and Gross fixed capital formation.

61. Furthermore ONS added another Use: 'Current and Capital Transfers', which was included in order to give a full indication of the spending within the education field.

62. The Central Government and Local Government's expenditure provide enough information to fill these tables. These can be found within the ONS's public spending dataset. The placement of the figures within the Uses table depends on where the income has been allocated, for example the Central Government expenditure on Central Government ran Primary and Secondary Schools will be placed into the Central Government column, while Local Government expenditure on Local Government funded schools is placed within Local Government, however expenditure by Central and Local Government on NPISH, is placed within the NPISH section. This section does not include the Government expenditure on Higher Education, since this is reflected within the Higher

Education and Further Education surveys. The current expenditure total is the same total as the Total Government Expenditure that has been used in the Resources section.

63. The other sources that allow the breakdown that matches the format of the Uses section are the ones that used for Universities and Further Education investment. For universities the data source is *HE finance survey* which includes Staff Costs. Other operating expenses is used to show Intermediate Consumption, since this the expense from the Universities on goods that they will need to provide a final product. Finally Depreciation, Interest and other finance costs are included as Gross fixed capital formation, since these are measures that refer to the increase in fixed capital assets.

64. The Further Education expenditure published within the *Further Education College accounts*, Staff costs⁷⁷ is used to suggest that Compensation of Employees, while Other operating expenses⁷⁸ is used to suggest the Intermediate Consumption. For the Gross Fixed Capital Formation, Depreciation⁷⁹, Interest and other finance costs⁸⁰ are used to measure these.

65. These mean that the uses in the table for the Central Government, Local Government, and NPISH are filled. For the Financial and Non-financial firms, none of sources identified for them contain how their expenditure, therefore the uses table for this section cannot be filled in. However, the total amount spent on education by institutional units to financial and non-financial corporations have been included in the Total Current Expenditure, in order to provide some balance to tables. The issue with this is that it has assumed that the income and the expenditure for these corporations are exactly the same.

D. Resources/Uses Table of the Sector by product

66. Table 5 is similar to Table 4. The main difference is that the breakdown of producers is done by education product, rather than institutional units producing education. The aim is to arrive at information assessing which education product resources from Financing Agents are allocated. Moreover, it is possible to identify the uses of the resources made by the producers of each education product. Ideally, it is possible to think about a classification that includes at the same time institutional sector and type of education product. The Education products that are measured are 'EP1', 'EP2', 'EP3', 'EP4', and 'EP5' and ONS followed the same methodology as it did in table 4 and table 2 in order to allocate the resources and the uses in table 5.

E. Supplementary Tables

67. Whereas the previous tables indicated the expenditure of the different institutional units on education, Table 6 and Table 7 put this information into context, highlighting non-monetary information on the education sector.

1. Supplementary information on population

68. Table 6 shows the information on the educational attainment of the population broken down by ISCED level, sex, and age group. The ISCED groups are ISCED 0-1

⁷⁷ Expenditure T1.7 Staff costs

⁷⁸ Expenditure T1.8 Other operating expenses

⁷⁹ Expenditure T1.9 Depreciation

⁸⁰ Expenditure T1.10 Interest and other finance costs

(EP1), ISCED 2-3 (EP2), and ISCED (4-8) (EP3). The information for this section has been calculated in collaboration with the UK's Department for Education (DfE).

2. Supplementary information on students and teachers

69. Table 7 shows the number of students and teachers within the UK broken down by the level of education and gender. It also shows the average costs and fees per pupil for each group of ISCED levels. This has been calculated by dividing the total amount spent within the ISCED level from Table 2 and then this is divided by the number of students thereby giving a number for the average costs per student.

70. The issue with the data is that do not include the non-ISCED education level. As a result, the numbers of students within these ISCED levels are much higher than they would be if they excluded non-ISCED students and the average costs would be higher as there would be fewer students within this section. This means that, while this can give a useful picture of the number of students and teachers, it is not a perfect indication.

F. Supplementary information on adults in continuing vocational training and on permanent education

71. Table 8 shows the number of adults in continuing vocational training and within permanent education broken down by age and sex. Also it shows the Costs and Fees per person for both of the above sections. The information has been gained from Eurostat. The issue here is that the information provides a participation rate rather than the number of people within this section. The Eurostat indicator, Participation rate in education and training (last 4 weeks) by sex and age is used to indicate the number within permanent education. Within the Table it is broken by sex, and age. The Guide suggests ages 15-34, 35-64 and total, however the data from Eurostat gives an age breakdown of 18-24, 25-34, 35-44, 45-54, 55-64, and total. While this does not show the 15-17 that the guide may wish to show, it does provide a more detailed breakdown than the guideline.

72. There is a larger issue with the dataset use to indicate continuing vocational training (CVT). The measure proportion of employees (all enterprises) participating in CVT courses, by sex and size class is used. This was judged to be the most appropriate measure as it gives a breakdown by sex. None of the datasets used to measure CVT courses had a breakdown by age, and while the title suggested a breakdown by sex, this was not achievable with the data. Additionally, the dataset only shows 2010, which is an issue with all the CVT datasets, therefore it should not manage to be able to be compared with the rest of the dataset, since there is a different year. It has been included within the Tables as there is information denoting continuing vocational training available, but the dataset within the future will need to line up with the rest of the tables.

IV. Issues and future work

A. Issues

73. An identified issue in ONS' pilot of a satellite account for education and training is that the ONS Public spending tables includes current transfers paid by the Government to foreign governments and international organisation. The difficulty is that the tables do not go into enough detail to provide this figure and so there is a risk that by including the DFID figure it may be double counting the expenditure spent on the rest of the world.

74. Additionally, there is an issue that NPISH investment from BIS Research Councils contains government expenditure, as BIS Research Councils are ran by the then-

Department of Business, Innovation and Skills (now: Department of Business, Energy and Industrial Strategy). Therefore they may already be measured using the Public expenditure data source. Since there is not a way to separate out this variable into government and non-government expenditure, it has been included as the other institutions within this variable need to be included as a measurement of expenditure on universities.

B. Areas for future work

75. In the SAE, the majority of tables have been populated to a certain degree. Nonetheless, there are some areas of work that could be explored in order to address these data gaps.

76. The analysis within the Supply table is limited, as the ONS's supply table does not provide industry-by-industry breakdowns of output. ONS will explore whether more collaboration between the SAE and Supply and Use teams could develop this data further.

77. Another piece of work within the Supply and Use tables would be to estimate, both for the Supply and Use or products, detail at the lower education product level.

78. One decision that was made within the compilation of the SAE was not to include expenditure on EP4 expenditure and EP5 expenditure that was spent on services relating to education (such as Cultural services as shown in Table 1) and expenditure on equipment used for educational purposes. This decision was made as this type of expenditure could not be limited for education purposes only. For example, expenditure on passenger transport by road would include passenger transport for business purposes and not solely on education. This would have led to a higher estimate of expenditure. As a result of this, work could be done in estimating the expenditure for the sole purpose of education among these groups.

79. Another future piece of work is to produce a SAE for a different year. This would allow comparisons of education expenditure over time. Additionally, it allows the strength and the adaptability of the sources.

V. Analysis and main findings

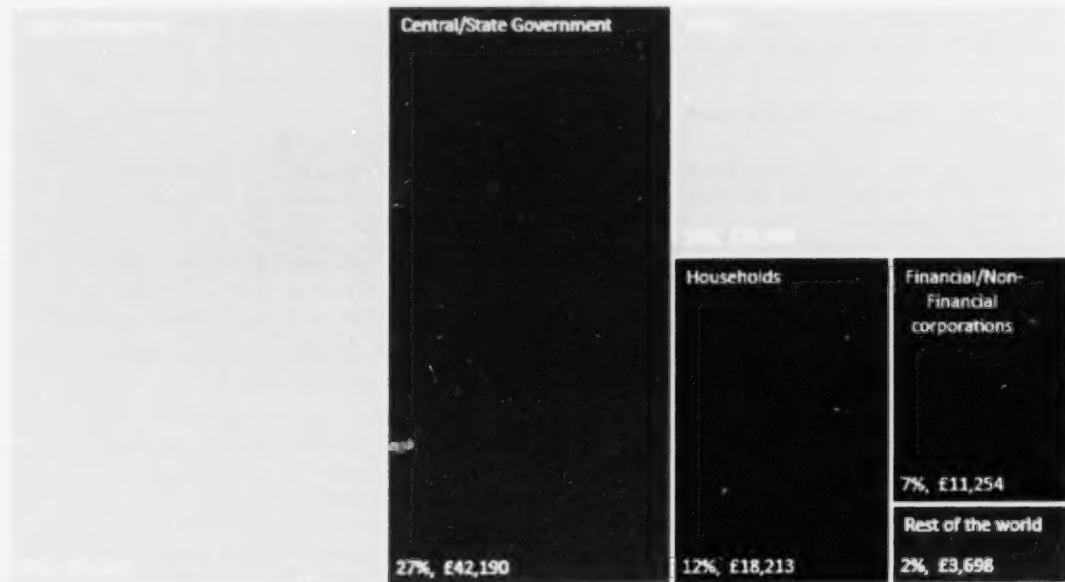
80. This section of the paper discusses the main findings of the SAE in UK. The development of the SAE tables allows a comprehensive analysis of the flow of Education expenditure within UK. This section will provide analysis on the components of education funding as well as on the distribution of education funding by education product. Additionally, the distribution of household spending on education and the sources of funding for Tertiary education will be addressed.

81. Figure 1 reveals that the majority of funding on education in UK in 2014 came from Local Government sources. Local Government were responsible for funding 36% of the total spending recorded in the SAE. At this period of time, the Local government was responsible for the funding both primary and secondary state schools in UK. Central Government spent the second highest amount on education in 2014, was accounting for 27% of the total spending. The majority was distributed between Academies (a form of secondary state school in the UK) and on Tertiary education.

82. Households spent 5% more than both financial and non-financial corporations combined on Education in UK in 2014. Corporations mainly fund EP4 which includes out of job training while Households mainly pay fees to the Higher education and other private education Institutions.

Figure 1

Total Education funding by source, UK, 2014, percentage and millions of pounds

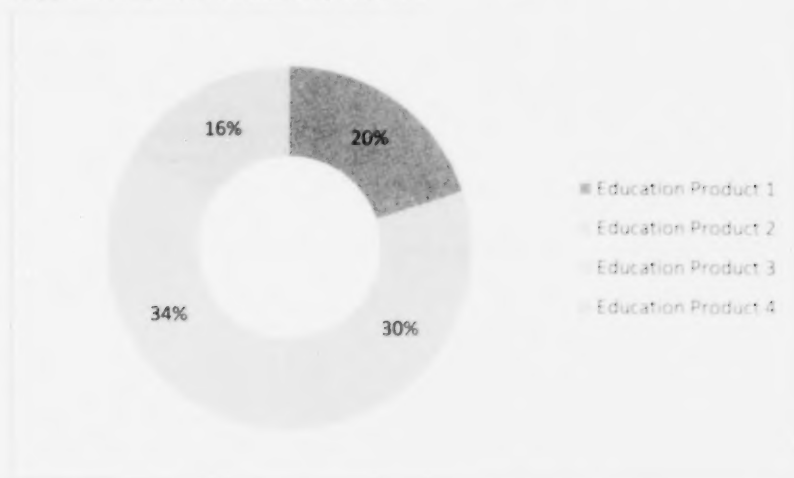


Source: Authors calculations based on the SAE.

Notes: The percentages are based on the total expenditure in the UK SAE. Area is in proportion to spending.

83. Figure 2 presents expenditure split by different education products. Expenditure is shown as a percentage of the total education spending. Higher education services received 34% of the total education funding in UK in 2014. On the other hand, EP 4, which includes off the Job training, received 16% of the total education spending during 2014. Financial and non-financial corporations were the main spenders on EP4 contributing more than half of the total expenditure recoded within EP4.

Figure 2
Expenditure by level of education, UK, 2014

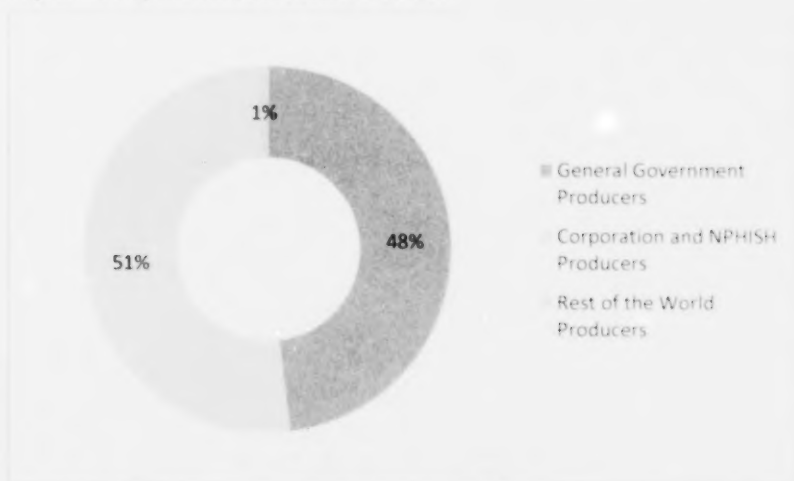


Source: Authors Calculations, exclude expenditures to the rest of the World

Notes: The percentages are based on the total expenditure that has been calculated in the UK's SAE.

84. Figure 3 breaks down expenditure by the education producers who receive that funding. Education produced by Corporations and the NPISH sector accounts for the largest share of total education expenditure, accounting for 51%, over 2% more than that of General Government Producers. The main funding source for General government production was Central and Local Government under the education product categories EPI and EP2. However, the source of funding for Corporations and NPISH producers was spread across a diverse range of sectors with funding mainly going to higher education.

Figure 3
Expenditure by Education Producer, UK, 2014



Source: Authors Calculations, exclude expenditures to the rest of the World

Notes: The percentages are based on the total expenditure that has been calculated in the UK's SAE.

85. Figure 4, shows Households spent 51% of their expenditure on education to EP3 during 2014. Households spent more than £9 billion on fees and ancillary expenditure at Universities during 2014, which represents expenditure included under the EP3 category. Furthermore, Households spent 35% of their total expenditure on education on education products which came under the heading EP1. This expenditure was mainly driven by spending on pre-primary education such as Nursery fees.

Figure 4

Household Expenditure by level of Education, UK, 2014

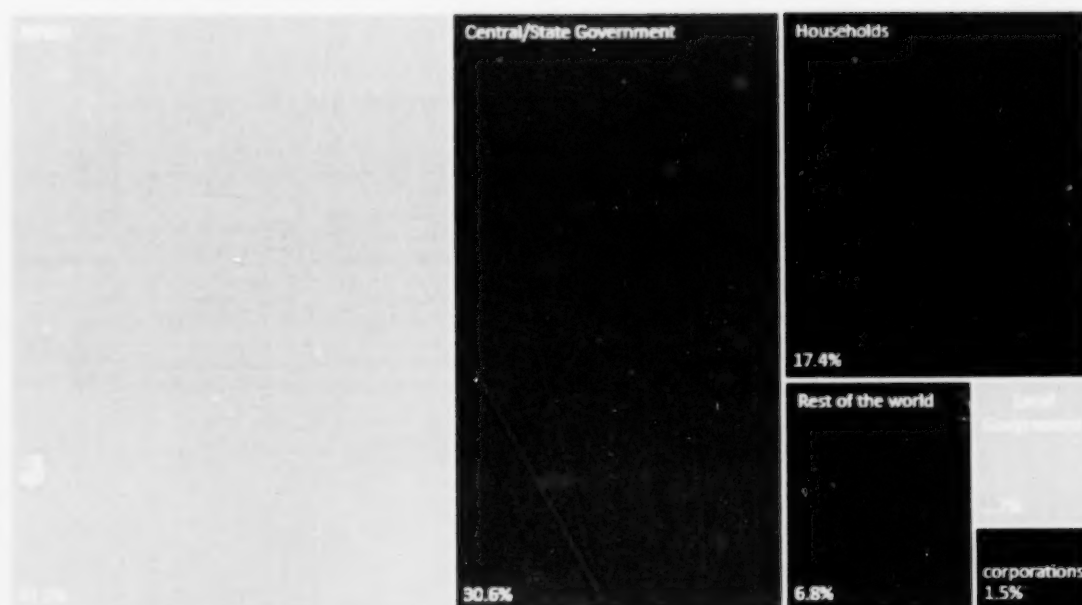


Source: Authors Calculations, exclude expenditures to the rest of the World

Notes: The percentages are based on the total household expenditure that has been calculated in the UK's SAE.

86. Although Households spend more than half of their expenditure to EP3, Households were only the third main source of funding for the EP3. Figure 5 shows the EP3 funding by source as percentage of total funding to EP3. EP3 funding from Households counts only as 17.4% of the total funding to EP3. The main funding sectors for EP3 type products were NPISH and Central Government. Their funding accounted for 41.0% and 30.6%, respectively, of the total funding to EP3 in 2014. Funding from NPISH includes research funds and income generated by Universities.

Figure 5
EP3 funding by source, UK, 2014



Source: Authors Calculations, exclude expenditures to the rest of the World

Notes: The percentages are based on the total EP3 expenditure that has been calculated in the UK's SAE.

Annex I

[English only]

SAE tables

Table I

ISCED Products considered in the SAE and correspondence with CPC, ver.2.1, ISIC rev.4, COFOG, COPNI, COICOP

		CPC ver 2.1	ISIC rev 4	COFOG	COPNI	COICOP
Education, administrative and other services	ISCED 0-1 (EP1)	921 Pre-primary education	851 Pre-primary and primary education	09.1 Pre-primary and primary education	04.1 Pre-primary and primary education	10.1.0 Pre-primary and primary education
		922 Primary education services				
	ISCED 2-3 (EP2)	923 Secondary education services	852 Secondary education	09.2 Secondary education	04.2 Secondary education	10.2.0 Secondary education
	ISCED 4-8 (EP3)	924 Post-secondary non-tertiary	8530 Higher education	09.3 Post-secondary non-tertiary education	04.3 Post-secondary non-tertiary education	10.3.0 Post-secondary non-tertiary
		925 Tertiary education services		09.4 Tertiary education	04.4 Tertiary education	10.4.0 Tertiary education
	Admin. services according ISCED level	91121 Public administrative services related to education	8412 Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security	09.6 Subsidiary services to education		
	Non-ISCED education: (EP4)	9291 Other education and training services	854 Other education	09.5 Education not definable by level	04.5 Education not definable by level	10.5.0 Education not definable by level
		92919 Other education and training services, n.e.c.	854 Other education	09.8 Education n.e.c. (CS)	04.7 Other educational services	
		92919 Other education and training services, n.e.c.	8549 Other education n.e.c.			7.2.4 Driving lessons
		92912 Sports and recreation education services	8541 Sports and recreation education		03.1.0 Recreational and sporting services	09.4.1 Recreational and sporting services
		92911 Cultural education services	8542 Cultural education		03.2.0 Cultural services	09.4.2 Cultural services
		9292 Educational support services	855 Educational support			
		93411 Vocational rehabilitation services for persons with disabilities	881 Social work activities without accommodation for the elderly and disabled		05.1.0 Social protection services	12.4.0 Social protection
		93412 Vocational rehabilitation services for unemployed persons	889 Other social work activities without accommodation			

Table 2
Transactions between Financing Agents and producers of education and training

FINANCING AGENT	Millions	PRODUCER								
		GENERAL GOVERNMENT				CORPORATIONS AND NPISH				Rest of the world
						PRODUCTS				
		(EP1)	(EP2)	(EP3)	(EP4)	(EP1)	(EP2)	(EP3)	(EP4)	(EP1-EP5)
Central State Government	S 1312	£813	£20 155	-	£1 966	£3	£474	£16 175	£1 783	£821
Local Government	S 1313	£24 664	£22 093	-	£3 496	-	-	£1 403	£4 019	-
Financial Non-Financial corporations	S 11 - S 12	-	-	-	-	-	-	£818	£10 436	-
NPISH	S 15	£231	£1 477	-	-	-	-	£21 680	£2 021	-
Households	S 14	-	-	-	-	£6 171	£1 634	£9 187	£961	£260
Rest of the world	S 2	-	-	-	-	£11	£60	£3 573	£53	-

Notes: The household sections - is from a release that indicates a financial year ending in 2015, as this is the only release that will contain some aspect of 2014 I've included this in the table.

Table 3
Use tables

		Inputs by industry (intermediate consumption)										Total intermediate consumption	Final Consumption (Households)	Final Consumption (Government Collective)	Final Consumption (Individual)	Final Consumption NPISH	Final Consumption Total	Gross capital formation	Total use at purchaser's price						
		Agriculture, forestry and fishery [1-3]	Other	Education services				Other	Total [85]	Other	Total [85]									Other	Total [85]	Other	Total [85]	Other	Total [85]
				Market Producer	Non-market producer	Market Producer	Non-market producer																		
Agriculture, forestry and fishery [1-3]		£ 3,949	£ 15,604	£ 54	£ 54	£ -	£ -	£ 79	£ 35,344	£ 18,873	£ -	£ -	£ -	£ 18,873	£ 2,843	£ 1,387	£ 58,447								
Other Sectors		£ 13,699	£ 1,236,281	£ 23,408	£ 9,465	£ 14,006	£ 147,972	£ 2,681,112	£ 1,001,807	£ 20,830	£ -	£ 3,704	£ 1,026,341	£ 497,017	£ 311,786	£ 4,516,256									
Education [85]	Total	£ 10	£ 8,857	£ 9,655	£ 2,741	£ 6,914	£ 6,917	£ 43,551	£ 15,435	£ 57,296	£ 25,408	£ 98,139	£ 3,668	£ 175	£ 145,563										
	EP1							£ -				£ -				£ -									
	EP2							£ -				£ -				£ -									
	EP3							£ -				£ -				£ -									
	EP4							£ -				£ -				£ -									
Other		£ 85	£ 24,028	£ 942	£ 635	£ 307		£ 54,471	£ 90,115	£ 280,403	£ -	£ 27,560	£ 398,078	£ 8,096	£ 3,924	£ 464,569									
Total (intermediate and final) use		£ 18,092	£ 2,011,050	£ 57,467	£ 22,361	£ 35,232		£ 5,495,590	£ 2,128,037	£ 379,359	£ -	£ 60,376	£ 2,567,772	£ 1,008,671	£ 629,058	£ 9,701,091									
Gross value added		£ 10,998	£ 1,250,552	£ 98,791	£ 47,335	£ 27,922		£ 2,950,085																	
Compensation of employees		£ 4,650	£ 621,596	£ 85,055	£ 46,915	£ 20,140		£ 1,606,993																	
Other net taxes on production		£ 2,350	£ 24,670	£ 358	£ 358	£ -		£ 49,039																	
Gross operating surplus/ Gross mixed income		£ 6,698	£ 604,286	£ 12,378	£ 9,636	£ 2,742		£ 1,317,587																	
Net operating surplus/ Net mixed income								£ -																	
Consumption of fixed capital								£ -																	
Total Output		£ 29,090		£ 156,258	£ 69,696	£ 63,154		£ 8,445,675																	
Supplementary information																									
Gross fixed capital formation																									
Labour input by level of education: Total (persons/hours)																									
EP1																									
EP2																									
EP3																									

Table 4
Resources/Uses Table of the Sector by institution producing education

Data in Millions	Central/State Government	Local Government	Financial/non-financial corporations (S.11/S.12)	NPIs (S.15)	Total
Resources					
Current transfer from financing agents (FA)					
Central/State Government (S.1311/S.1312)	£ 22,934	£ 1,220			£ 24,154
Local Government (S.1313)		£ 50,253			£ 50,253
Financial/Non-financial corporations (S.11/S.12)					£ -
NPIs (S.15)					£ -
Households (S.14)					£ -
Rest of the world (S.2)					£ -
Income From sales			£ 7,369	£ 10,254	£ 17,623
Capital Transfer from financing agents					
Central/State Government (S.1311/S.1312)			£ 477	£ 17,958	£ 18,435
Local Government (S.1313)				£ 5,422	£ 5,422
Financial/Non-financial corporations (S.11/S.12)			£ 20,638	£ 1,592	£ 22,230
NPIs (S.15)	£ 575			£ 3,093	£ 3,668
Households (S.14)					£ -
Rest of the world (S.2)			£ 117	£ 5,876	£ 5,993
Other incomes (from capital, insurance, rents)				£ 4,893	£ 4,893
	£ 23,509	£ 51,473	£ 28,601	£ 49,089	£ 152,672
Uses					
Intermediate consumption	£ 6,208	£ 15,426		£ 16,137	£ 37,771
Compensation of employees	£ 12,937	£ 25,943		£ 23,930	£ 62,810
Wages and salaries					£ -
Employers' social contributions	£ 27	£ 2,274		£ 699	£ 3,000
Taxes on production and imports					£ -
Less Subsidies	£ 477	£ -		£ 253	£ 730
Consumption of fixed capital					£ -
Current & Capital Transfers	£ 907			£ 180	£ 1,087
Total current expenditure	£ 23,986	£ 50,681	£ 29,433	£ 44,764	£ 148,864
Gross fixed capital formation	£ 2,855	£ 7,038		£ 3,566	£ 13,459

Table 5
Resources/Uses Table of the Sector by product

Data in Millions	Formal Education/training Total (EP1 - EP3)				Non formal education/training EP4	Total
	EP1 (ISCED 0-1)	EP2 (ISCED 2-4)	EP3 (ISCED 5-8)	Total (EP1-EP3)		
Resources						
Current transfer from financing agents (FA)						
Central/State Government (S 1311/S 1312)	€ 813	€ 20,155		€ 20,968	€ 1,966	€ 22,934
Local Government (S 1313)	€ 24,664	€ 22,093		€ 46,757	€ 3,496	€ 50,253
Financial/Non-financial corporations (S 11/S 12)				€ -		€ -
NPISHs (S 15)				€ -		€ -
Households (S 14)				€ -		€ -
Rest of the world (S 2)				€ -		€ -
Income from sales	€ 5,998	€ 1,372	€ 9,368	€ 16,737	€ 886	€ 17,623
Capital Transfer from financing agents						
Central/State Government (S 1311/S 1312)	€ 3	€ 474	€ 16,175	€ 16,652	€ 1,783	€ 18,435
Local Government (S 1313)			€ 1,403	€ 1,403	€ 4,019	€ 5,422
Financial/Non-financial corporations (S 11/S 12)			€ 1,592	€ 1,592	€ 20,638	€ 22,230
NPISHs (S 15)	€ 78	€ 498	€ 3,032	€ 3,607	€ 61	€ 3,668
Households (S 14)				€ -		€ -
Rest of the world (S 2)	€ 19	€ 98	€ 5,790	€ 5,906	€ 87	€ 5,993
Other incomes (from capital, insurance, rents)			€ 3,926	€ 3,926	€ 967	€ 4,893
Uses						
Intermediate consumption	€ 7,095	€ 11,065	€ 11,199	€ 29,359	€ 8,412	€ 37,771
Compensation of employees	€ 13,371	€ 24,115	€ 16,573	€ 54,059	€ 8,751	€ 62,810
Wages and salaries				€ -		€ -
Employers' social contributions	€ 1,204	€ 1,097		€ 2,301	€ 699	€ 3,000
Taxes on production and imports				€ -		€ -
Less Subsidies	€ 3	€ 474		€ 477	€ 253	€ 730
Consumption of fixed capital				€ -		€ -
Current & Capital Transfers	€ 28	€ 59		€ 87	€ 1,000	€ 1,087
Total current expenditure	€ 31,577	€ 45,163	€ 30,748	€ 107,489	€ 40,544	€ 148,032
Gross fixed capital formation	€ 3,779	€ 5,912	€ 2,977	€ 12,668	€ 791	€ 13,459

Table 6
Supplementary information on population

In thousands	Education Attainment				
	Age Group	ISCED 0-1	ISCED 2-3	ISCED 4-8	Total
Resident population	Total	0.1%	57.2%	42.7%	100%
Male	Total	0.1%	59.5%	40.4%	100%
	0-14				
	15-34	0.0%	61.3%	38.7%	100%
	35-64	0.1%	58.3%	41.6%	100%
	65 and over				
Female	Total	0.1%	54.7%	45.3%	100%
	0-14				
	15-34	0.0%	54.3%	45.7%	100%
	35-64	0.1%	54.8%	45.1%	100%
	65 and over				

Table 7
Supplementary information on students and teachers

	Level of Education				Total
	ISCED 0-1	ISCED 2-3	ISCED 4-8	NON-ISCED	
Number of Students	6,656,612	6,374,675	2,330,334		15,361,621
Male	3,427,448	3,213,094	1,021,894		7,662,436
Female	3,229,165	3,161,580	1,308,441		7,699,186
Average costs and fees (per pupil/student)	4,743.22	7,010.44	17,789.06		7,663
Number of teachers	320,014	412,359	148,524		880,896

Annex II**[English only]****Converting financial years to calendar years methodology**

87. The data sources used in this pilot are collected and published in Financial years so as a result some work is needed to convert that data into Calendar years. To do this, data are taken from both the 2013-14 and 2014-15 survey sources and weighted in accordance with the number of months which fall in 2014, as 2014 is the target reference year for this pilot.

Annex III**[English only]****Estimating United Kingdom results from England-only data**

88. For surveys that are only representative of England, rather than the United Kingdom as whole, data coverage needs to be adjusted so it is a best representation of the entire UK (adding Scotland, Wales, and Northern Ireland). This is done using ONS' population estimates. To carry this out, the English Population is divided by the United Kingdom, then 1 is divided by the percentage left over from that calculation and this gives a percentage that if multiplied to a figure from the survey will make it representative of the UK as a whole.

References

[English only]

- Department of Education (2017) 'Statistics: Local Authority and school finance'. Available at: <https://www.gov.uk/government/collections/statistics-local-authority-school-finance-data>. [Accessed: 23/08/17]
- Department of education (2016) 'Childcare and Early years survey of parents: 2014 to 2015'. Available at: <https://www.gov.uk/government/statistics/childcare-and-early-years-survey-of-parents-2014-to-2015>. [Accessed: 23/08/17]
- Department for International Development (2017) 'Statistics on international development 2016'. Available at: <https://www.gov.uk/government/statistics/statistics-on-international-development-2016>. [Accessed: 23/08/17]
- Eurostat (2016) 'International Standard Classification of Education (ISCED)'. Available at: [http://ec.europa.eu/eurostat/statistics-explained/index.php/International_Standard_Classification_of_Education_\(ISCED\)](http://ec.europa.eu/eurostat/statistics-explained/index.php/International_Standard_Classification_of_Education_(ISCED)). [Accessed: 23/08/17]
- Eurostat (2010) 'European system of accounts'. Available at: <http://ec.europa.eu/eurostat/documents/3859598/5925693/KS-02-13-269-EN.PDF/44cd9d01-bc64-40e5-bd40-d17df0c69334>. [Accessed: 24/08/17]
- Eurostat (2011) 'Manual on sources and methods for the compilation of COFOG statistics'. Available at: <http://ec.europa.eu/eurostat/documents/3859598/5917333/KS-RA-11-013-EN.PDF/2eb9714a-ee4b-491e-baab-e9at5ca457b1>. [Accessed: 24/08/17]
- GOV.UK (n.d.) 'Types of schools – Academies'. Available at: <https://www.gov.uk/types-of-school/academies>. [Accessed: 30/08/2017]
- GOV.UK (n.d.) 'Types of Schools – Free schools'. Available at: <https://www.gov.uk/types-of-school/free-schools/>. [Accessed: 30/08/2017]
- GOV.UK (n.d.) 'Types of Schools – Private schools'. Available at: <https://www.gov.uk/types-of-school/private-schools>. [Accessed: 30/08/2017]
- HESA (2015) 'Finances of Higher Education Providers 2013/14'. Available at: <https://www.hesa.ac.uk/data-and-analysis/publications/finances-2013-14>. [Accessed: 22/08/17]
- HESA (2016) 'Finances of Higher Education Providers 2014/15'. Available at: <https://www.hesa.ac.uk/data-and-analysis/publications/finances-2014-15>. [Accessed: 22/08/17]
- HESA (2015) 'Students in Higher Education 2013/14'. Available at: <https://www.hesa.ac.uk/data-and-analysis/publications/students-2013-14>. [Accessed: 24/08/17]
- HESA (2016) 'Students in Higher Education 2014/15'. Available at: <https://www.hesa.ac.uk/data-and-analysis/publications/students-2014-15>. [Accessed: 24/08/17]
- Independent Schools Council (2014) 'ISC Annual Census 2014'. Available at: <https://www.isc.co.uk/research/annual-census/isc-annual-census-2014/>. [Accessed: 22/08/17]
- OECD (2001) 'Financial Corporations'. Available at: <https://stats.oecd.org/glossary/detail.asp?ID=964>. [Accessed: 22/08/17]
- OECD (2001) 'Non-financial corporations'. Available at: <https://stats.oecd.org/glossary/detail.asp?ID=1805>. [Accessed: 22/08/17]

- ONS (2017) 'ESA Table 11 Annual Expenditure of Central Government'. Available at: <https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/publicspending/datasets/esatable11annualexpenditureofcentralgovernment>. [Accessed 22/08/2017]
- ONS (2017) 'ESA Table 11 Annual Expenditure of Local Government'. Available at: <https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/publicspending/datasets/esatable11annualexpenditurelocalgovernment>. [Accessed 22/08/17]
- ONS (2016) 'Input-output supply and use tables'. Available at: <https://www.ons.gov.uk/economy/nationalaccounts/supplyandusetables/datasets/inputoutputsupplyandusetables>. [Accessed 22/08/17]
- ONS (2016) 'Households and non-profit institutions serving households'. Available at: <https://www.ons.gov.uk/economy/grossdomesticproductgdp/compendium/unitedkingdomnationalaccountsthebluebook/2016edition/householdsandnonprofitinstitutionservinghouseholds>. [Accessed: 22/08/17]
- ONS (2012) 'Reclassification of Further Education Corporations and Sixth Form corporations in England, May 2012'. http://webarchive.nationalarchives.gov.uk/20160107051314/http://www.ons.gov.uk/ons/dcp/171766_266962.pdf. [Accessed: 25/08/17]
- ONS (2017) 'UK input-output analytical tables'. Available at: <https://www.ons.gov.uk/economy/nationalaccounts/supplyandusetables/datasets/ukinputoutputanalyticaltables-detailed>. [Accessed 22/08/17]
- Skills Funding Agency and Education Funding Agency (2017) 'Financial Management: college accounts'. Available at: <https://www.gov.uk/government/publications/sfa-financial-management-college-accounts>. [Accessed: 22/08/17]
- Task Force on Measuring Human Capital (2016). 'Guide on Measuring Human Capital'. Available at: <https://unstats.un.org/unsd/nationalaccount/consultation/DoesHumanCapitalGuide%20Global%20Consultation-v1.pdf>. [Accessed: 23/08/17]
- UK Commission for Employers and Skills (2014) 'UKCES Employers Skills Survey 2013: UK report'. Available at: <https://www.gov.uk/government/publications/ukces-employer-skills-survey-2013>. [Accessed: 22/08/17]
- UK Commission for Employers and Skills (2016) 'UKCES Employers Skills Survey 2015: UK report'. Available at: <https://www.gov.uk/government/publications/ukces-employer-skills-survey-2015-uk-report>. [Accessed: 22/08/17]
- University of Sheffield (n.d.) 'Approval and Quality Assurance of Short Course'. Available at: <https://www.sheffield.ac.uk/letsppqa/shortcourses>. [Accessed: 31/08/2017]
- UNSTATS (n.d.) 'ISIC rev.4'. Available at: <https://unstats.un.org/unsd/cr/registry/regest.asp?Cl=27>. [Accessed: 23/08/17]
- UNSTATS [n.d.] 'CPC ver 2.1'. Available at: <https://unstats.un.org/unsd/cr/registry/regest.asp?Cl=31>. [Accessed: 23/08/17]
- UNSTATS [n.d.] 'COFOG'. Available at: <https://unstats.un.org/unsd/cr/registry/regest.asp?Cl=4>. [Accessed: 23/08/17]
- UNSTATS [n.d.] 'COPNI'. Available at: <https://unstats.un.org/unsd/cr/registry/regest.asp?Cl=6>. [Accessed: 23/08/17]
- UNSTATS (n.d.) 'COICOP'. Available at: <https://unstats.un.org/unsd/cr/registry/regest.asp?Cl=5>. [Accessed: 23/08/17]